APPLN. SERIAL NO. ATTY, DOCKET NO. UIOWA-8P4D1 09/661,153 LIST OF RESTRICT ART CITED BY APPLICANT(S) APPLICANT Matthew A. Howard, III GROUP FILING DATE (PTO-1449) September 13, 2000 To be assigned U.S. PATENT DOCUMENTS: **EXAMINER'S FILING** PATENT NO. DATE NAME CLASS **SUBCLASS** INITIALS DATE 5,554,643 Horwell, et al. 514 09/10/96 419 607 5,540,734 07/30/96 Zabara 46 Horwell, et al. 514 310 5,523,306 06/04/96 204 403 5,443,710 08/22/95 Broderick 514 Greenwood, et al. 5,399,565 03/21/95 314 -- -307 ▮ ¼ ╚— \ 5,397,788 03/14/95 Horwell, et al. 514 Johnson, et al. 540 95 5,373,095 12/13/94 128 732 Ochs 5,365,939 11/22/94 18 ECHNOLOGY CENTER I 5,340,802 08/23/94 Shiosaki, et al. 514 5,332,401 07/26/94 Davey, et al. 607 116 5,298,622 03/29/94 Portoghese et al. 546 15 5,263,480 Wernicke, et al. 607 118 11/23/93 424 94.67 5,262,178 11/16/93 Camine, et al. 5,188,104 02/23/93 Wernicke, et al. 128 419R FOREIGN PATENT DOCUMENTS **EXAMINER'S** Translation

INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Yes	No
·				- 1			
	OTHER	ART (Including	Author, Title, Date, Perti	nent Pages, Et	c.) 字: [[字]	對域	

Dieckman G, Schneider H. "Influence of Stereotactic Hypothalamotomy on Alcohol and Drug Addiction." Appl. Neurophysiol. 41:93-98,1978

Mayanagi Y, Hori T, Sano K. "The Posteromedial Hypothalamus and Pain, Behavior, with Special Reference to Endocrinological Findings." Appl. Neurophysiol 41:223-231, 1978

Nakao H. "Emotional behavior produced by hypothalamic stimulation", Am J Physiol 194:411-418,

Sano K. "Effects of Stimulation and Destruction of the Posterior Hypothalamus in Cases of Behaviour Disorders and Epilepsy." Special topics in stereotaxis, Berlin Symposion 1970. Hippokrates Verlag

Bielajew C, Stenger J, Schindler D. "Factors that contribute to the reduced weight gain following chronic ventromedial hypothalamic stimulation." Behavioral Brain Research 62:143-148, 1994.

Stenger J, Fournier T, Bielajew C. "The Effects of Chronic Ventromedial Hypothalamic Stimulation on Weight Gain in Rats." Physiol. Behav. 50:1209-1213, 1991.

DATE COMSIDÉRED. EXAMINER (

MAY 0 3 2001

## LIST OF PRIOR ART CITED BY APPLICANT

ATTY. DOCKET NO. UIOWA-8P4D1

APPLN. SERIAL NO. **09/661.153** 

APPLICANT(S)

Matthew A. Howard, III

(PTO-1449) FILING DATE September

GROUP
To be assigned

### September 13, 2000 U.S. PATENT DOCUMENTS . . **FILING EXAMINER'S CLASS SUBCLASS** NAME DATE PATENT NO. DATE INITIALS 424 Lenk, et al. 450 5,169,637 12/08/92 600 26 12/08/92 Brennan 5,169,380 514 17 06/09/92 Mugica 5,120,713 Malin, et al. 604 20 5,084,007 01/28/92 128 423R Capel 4,646,744 03/03/87 514 3 Wurtman 09/17/85 4,542,123 128 1C 10/02/73 Ballentine, et al. 3,762,396 الحريسيانا MAY 0 & 2001 TECHNOLOGY CENTER R3700 FOREIGN PATENT DOCUMENTS **EXAMINER'S** COUNTRY CLASS **SUBCLASS** INITIALS PATENT NO. DATE OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.) DATE CONSIDERED EXAMINER.

#### SHEET 3 OF 7 APPLN. SERIAL NO. ATTY. DOCKET NO. UIOWA-8P4D1 09/661,153 LIST OF PRIOR ART CITED BY APPLICANT(S) (TAPT) CANT Matthew A. Howard, III GROUP FILING DATE (PTO-1449) September 13, 2000 To be assigned U.S. PATENT DOCUMENTS **EXAMINER'S FILING SUBCLASS** PATENT NO. DATE NAME CLASS INITIALS DATE 4.357.497 11/02/82 Hochmair et al. 179 107E 4,969,468 11/13/90 Byers et al. 128 642 5,496,369 03/05/96 Howard, III 623 10 5,099,846 03/31/92 Hardy 128 653.1 Haaga 265 5,254,105 10/19/93 604 10/05/93 Evans et al. 604 5,250,033 160 Heilbrun et al. 5,389,101 02/14/95 606 130 VIAY 0 8 21101 2 07/04/95 Williams 600 5,429,582 07/25/89 Putz 128 642 4,850,359 TECHILOLOGY CENTER R3700 67 5,328,460 07/12/94 Lord et al. 604 4,735,968 04/05/88 Guth 514 561 4,360,019 11/23/82 Portner et al. 128 213R 12/25/84 604 28 4,490,137 Moukheibir FOREIGN PATENT DOCUMENTS Translation **EXAMINER'S** PATENT NO. DATE CLASS **SUBCLASS** INITIALS COUNTRY EP 0,259,906 03/16/88 0,158,397 10/1985 **EPO** OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.) James P. Morgan, "The First Reported Case of Electrical Stimulation of the Human Brain," J. Hist. Med., January, 1982, pp. 51-63 A. Earl Walker, "The Development of the Concept of Cerebral Localization in the Nineteenth Century," Bulletin His. Med., Vol. 31, No. 2, March-April, 1957, pp. 99-121. Penfield et al., "Somatic Motor and Sensory Representation in the Cerebral Cortex of Man as Studied by Electrical Stimulation," Brain, Vol. 60, 1937, pp. 389-443. Penfield et al., "The Brain's Record of Auditory and Visual Experience," Brain, Vol. 86, December 1963, pp. 596-696. Dobelle et al., "Artificial Vison for the Blind: Electrical Stimulation of Visual Cortex Offers Hope for a Functional Prosthesis," Science, Vol. 183, 1974, pp. 440-444. Dobelle et al., "A Prothesis for the Deaf Based on Cortical Stimulation," Ann. Otol., Vol. 82, 1973, pp.

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant

DATE CONSIDERÉD

445-463

**EXAMINER** 

SHEET 4 OF 7

APPLN. SERIAL NO. ATTY. DOCKET NO. LIST OF PROPART CITED BY UIOWA-8P4D1 09/661,153 APPLICANT(S) APPLICANT Matthew A. Howard, III GROUP FILING DATE (PTO-1449) September 13, 2000 To be assigned U.S. PATENT DOCUMENTS EXAMINER'S FILING CLASS **SUBCLASS** INITIALS DATE PATENT NO. DATE NAME 06/22/93 Chang 606 130 5,221,283 606 34 4,907,589 03/13/90 Cosman 08/30/94 Nardella 128 642 5,341,807 Wulf 604 264 5,385,560 01/31/95 5,405,375 04/11/95 Ayers et al. 607 122 128 642 4,892,102 01/9/90 Astrinsky 642 128 5,429,131 07/04/95 Scheinman et al. 5,642,544 10/03/95 Saksena et al. 606 12/17/96 Duluco et al. 606 185 5,584,847 n a 20 a 1 Hart et al. 604 167 5,380,288 01/10/95 39TECHNOLOGY CENTER Swanson et al. 606 12/10/96 5,582,609 128 2.1 3,147,750 09/08/64 Fry 01/05/93 Littrell 604 167 5,176,652 Goldreyer 128 642 5,385,146 01/31/95 99 08/13/96 Fleischman 607 5,545,193 10 5,545,219 08/13/96 Kuzma 623 642 4,461,304 07/24/84 Kuperstein 128 FOREIGN PATENT DOCUMENTS Translation **EXAMINER'S** SUBCLASS **INITIALS** PATENT NO. DATE COUNTRY CLASS OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.) Cohen et al., "A Prospective, Randomized Study of Cochlear Implants," N.E. J. of Med., Vol. 328, No. 4, January 1993, pp. 233-237. Eisenberg et al., "Electrical Stimulation of the Auditory Brain Stem Structure in Deafened Adults," J. Rehab. Research, Vol. 24, No. 3, 1987, pp. 9-22. Center for Integrated Sensors and Circuits, "Passive Multichannel Recording and Stimulating Electrode Arrays: A Catalog of Available Designs", July 1991. Medtronic, "The ITREL® II, The third generation of excellence, (1991). Eggermount, "Neural Interaction in Cat Primary Auditory Cortex," 10/92; pp 1216-1228 J. of Neurophysiology, Vol. 68, NO. 4. Bak, M. et al., "Visual Sensations producted by Intracortical Microstimulation of the Human Occipital Cortex, Med. Biol. Eng. Comput., 28:257-259 (1990). DATE CONSIDERED EXAMINER

# MAY 0 3 2001 ELIST OF PRIOR ART CITED BY

(PTO-1449)

ATTY. DOCKET NO. UIOWA-8P4D1

APPLN. SERIAL NO. **09/661,153** 

APPLICANT(S)

Matthew A. Howard, III

FILING DATE
September 13, 2000

GROUP

To be assigned

	(	<u> </u>		September 19	, 2000	TO DE assig	illeu	
		U	.S. PATENT DO	CUMENTS				
EXAMINER'S	DATENTNO	DATE	Γ,	IAME	CLASS	SUBCLASS	FILI DA	
INITIALS	5,545,201	08/13/96	Helland	AIVIE	607	127	DA	<u> </u>
9019	<del></del>	08/09/88	Van Der Puije e		128	784		
<del></del>	4,762,135	<del></del>	i	: ai	607	122		
	5,545,200	08/13/96	West et al.			213 7	F3547 , \$	
	5,531,759	07/02/96	Kensey et al.		606	786	, , ,	, acres
	5,119,832	06/09/92	Xavier	. 1	128	Ĭ ·	i	
<del>-   /</del>	5,000,194	03/19/91	van den Honert	et al.	128	784 MAY	082	0:31
<del>-                                     </del>	5,271,397	12/21/93	Segliman et al.	•	607	10 10ECHNOLO	CV Chi	, b-16 h
<del></del>	5,697,975	12/16/97	Howard III, et a	ıl.	623	10EUNIVULU	DI OLIV	1 - 11 1
					_			
		<del> </del>			-			
		ļ						
				· ·		ļ	ļ	
						<u> </u>		
		FOR	EIGN PATENT	DOCUMENTS				
EXAMINER'S	5475117110			. WITOV	0,400	Translat		
INITIALS	PATENT NO.	DATE	- 60	UNTRY	CLASS	SUBCLASS	Yes	No
					1	<del></del>		
	1					-		
		<del> </del>						
						<u> </u>		L
	····		<del>-</del>	tle, Date, Pertine				
11 (10	Brindley, G.S. et Physiol. 196:479		ations Produced 1	y Electrical Stimu	ılation of the	Visual Cortex	, J.	
1XXX	Damasio et al., " 143 (Feb 1992).	Three-dimensi	onal In Vivo Mar	pping of Brain Les	ions in Huma	ns, Arch. Neu	rol 49:1	37-
186	Drake, K.L., et al.: "Performance of Planar Multisite Microprobes in Recording Extracellular Single-Unit Intracortical Activity, IEEE Trans. BME 35-719-732 (1988).							
	-			olant, Otolaryngol			(1984).	****
		al., "Neurofibr		eral Acousitc Neu				***
KLA		l., "Epilepsy ar	nd the Functional	Anatomy of the H	luman Brain,	Little, Brown	and	
, ,	Company, Dosto.	, \						
	1 ./ 1	1 1	Δ					

LIST OF ART CITED BY
APPLICANT

APPLN. SERIAL NO. ATTY. DOCKET NO. UIOWA-8P4D1 09/661,153 APPLICANT(S)

Matthew A. Howard, III

	(PTO-	1449)	FILING DATE September 13, 2000		GROUP To be assigned						
			U.S. PATENT DO			······································					
EXAMINER'S INITIALS,	PATENT NO.	DATE		IAME	CLASS	SUBCLASS	FILI DA				
JANG.	4,968,306	11/6/90	Huss et al.								
7	5,053,002	10/1/91	Barlow								
7	4,245,645	1/20/81	Arsenealult et a	ıl.							
1/	4,522,212	6/11/85	Gelinas et al.		Fq L		1	. )			
	5,429,131	7/4/95	Scheinman et a	1.			٠ ـــ				
						MAY 0 8	2001				
					TEC	HNOLOGY CE	VIER R	3700			
			<u> </u>			<u></u>					
		FO	REIGN PATENT	DOCUMENTS		<u> </u>					
EXAMINER'S	BATENTNO	DATE.			CLASS	CUBCLACE	Trans	T			
INITIALS	PATENT NO. EP 0 124 930	11/14/84	Commonwealth	UNTRY	CLASS	SUBCLASS	Yes	No			
	EF 0 124 930	11/14/04	Conunctivean	i oi Australia		<del> </del>					
	<u>                                     </u>	<del> </del>	*	<del></del> -				<del> </del>			
-		<del> </del>				1		1			
			<del> </del>	<del></del>							
	ОТН	R ART (Incl	uding Author, Ti	tle. Date. Pertine	nt Pages, Etc	e.)					
	,						lation"				
Ifukube, T. et al, "Design of an Implantable Tinnitus Suppressor By Electrical Cochlear Stimulation"  Biomechanics, Rehabilitation, Electrical Phenomena, Bimaterials, October 28-31, 1993, pp 1349-13											
Pi D.	Dobelle, W.H., "A Prosthesis for the Deaf Based on Cortical Stimulation", Annals of Otology,										
KXA	Rhinology and Laryngologyad., Vol. 82, 1973, pp 445-463.										
		rumotogy and Laryngotogyadi, 100 02, 2210, pp 110 100.									
	./ //	1 0			·	,					
EXAMINER	KAH.	I land	polici D	ATE CONSIDER	ED						

## LIST OF PROOF ANT CITED BY **APPLICANT**

(PTO-1449)

ATTY. DOCKET NO. UIOWA-8P4D1

APPLN. SERIAL NO. 09/661,153

APPLICANT(S)

Matthew A. Howard, III

**FILING DATE** September 13, 2000 **GROUP** To be assigned

## **U.S. PATENT DOCUMENTS**

EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
GOV.	4,154,247	5-1979	O'Neill	607	125	
	5,582,609	12-1996	Swanson et al.	606	39	
	4,892,102	1-1990	Astrinsky	600	374	
	5,551,426	9-1996	Hummel et al.	600	374	
	4,244,362	1-1981	Anderson	600	585	
	5,462,544	10-1995	Saksena et al.	606	15	
	5,536,267	7-1996	Edwards et al.	606	41	
	5,429,161	7-1995	Scheinman et al.	600		WAY 0 8 2 0
	5,119,832	6-1992	Xavier	607	117 TECHN	OLOGY CENT
	5,341,807	8-1994	Nardella	600	381	a. o
	5,417,207	5-1995	Young et al.	600	323	
	4,172,451	10-1979	Kline	600	374	
	4,522,212	6-1985	Gelinas et al.	600	374	
	5,855,576	6-1999	LeVeen et al.	606	41	
	5,702,429	12-1997	King	607	116	
	5,327,889	7-1994	Imran	600	585	
	5,983,126	11-1999	Wittkampf	600	509	
	4,565,200	1-1986	Cosman	600	585	
	5,487,739	1-1996	Aebischer et al.	604	890.1	

EXAMINER'S						Translation	
INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Yes	No
				I			
-							
	- <del>V. 1</del>						
	· · · · · · · · · · · · · · · · · · ·			<del>                                     </del>			
					İ		

## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINED DATE CONSIDERED